REMARKS

I. Status of the Application

Claims 48-73, 75-104, 106-126, 152-164 and 200-219 are presently pending in the application. Claims 52 and 90 stand rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. Claims 48-73, 75-104, 106-126, 152-198 and 200-219 stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite. Applicants gratefully acknowledge that claims 48-73, 75-104, 106-126, 152-198 and 200-219 would be allowable if rewritten or amended to overcome the rejections under 35 U.S.C. §112, first and second paragraphs.

Claims 52 and 90 have been rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement because the Examiner is of the opinion that there is no cover plate described in the specification as filed in the 5 nl dispenser embodiment, and there is no magnetic sensing for the reference points in the specification as filed. The Examiner states that the new matter added by amendment should be cancelled in response to the instant Office Action. Applicants respectfully traverse this rejection.

Applicants respectfully submit that the instant specification teaches both the claimed cover plate and the claimed device for sensing changes in magnetic properties. With respect to the cover plate, at page 34, line 19 of the specification, Applicants teach "application of a film or a ***coverplate***" (emphasis added). Applicants note that this teaching is located in a section of the specification entitled "Spotting Embodiments," and that the very first sentence of this section teaches, "monomers (or other reactants) are deposited from a ***dispenser***" (specification, page 25, lines 7-9, emphasis added). Thus, Applicants' specification provides adequate support for this limitation in the context of the claimed dispenser embodiment. With respect to magnetic sensing, Applicants teach, at page 28, lines 2-6 of the specification, "In one embodiment, the

dispenser is aligned with respect to the region of interest by a system analogous to that employed in ***magnetic*** and optical media storage media fields. For example, the region in which monomer is to be deposited is identified by a track and ***sensor location*** on the disk....When the appropriate cell is positioned below the dispenser (as referenced by the appropriate sector on the track), a droplet of monomer solution is released" (emphasis added). Therefore, Applicants' specification provides adequate support for the claimed device for sensing changes in magnetic properties to identify the reference points. Thus, Applicants submit that the specification provides adequate written description for the claimed invention. Accordingly, Applicants request that the rejection of claims 52 and 90 under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement, be reconsidered and withdrawn.

Claims 80 and 177 stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite for reciting the trademark/trade name Pyrex. The Examiner states that the trademark/trade name is used to identify/describe a type of glass and, accordingly, the identification/description is indefinite. In response, Applicants have amended claims 80 and 177 to replace the term "pyrex" with "borosilicate glass." In support of this amendment, Applicants submit herewith the *Wikipedia* definition of Pyrex, which teaches that it is "a brand name of borosilicate glass" (Attachment A). Accordingly, Applicants request that this rejection be reconsidered and withdrawn.

Claims 48 and 152 stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite because, the Examiner asserts, it is unclear how "solution of compound" relates to the ligands arrayed. The Examiner is of the opinion that the prior response was not persuasive because there is no stated relationship between the compound, the single coupling steps or the ligands formed. The Examiner states that although the eventual compound at the localized area

is a ligand, that is not in fact claimed. In response, Applicants have amended claims 48 and 152 to recite the positioning system capable of positioning the dispenser relative to individual localized on the support until an array of ligands each at individual localized areas is formed "by the dispenser dispensing the solution of the compound onto the support." Although Applicants believe that the claimed subject matter prior to amendment meets the requirements 35 U.S.C. §112, second paragraph, Applicants now believe that the claim explicitly recites what was at least inherently required by the claim, namely that the positioning system in combination with the dispenser dispenses the compound to localized areas on the support to form an array of ligands. The specification teaches that the compounds can be the ligands themselves or the ligands can be formed from repeated dispensing of monomers, i.e. ligand components. See page 3, line 39 to page 4, line 4 of the specification, where Applicants teach spotting first, second, third, etc. solutions such that polymers are formed, and at page 6, lines 24-31 of the specification, where Applicants teach that ligands include molecules such as viral epitopes, peptides, sugars, oligonucleotides, nucleic acids, oligosaccharides, proteins and the like. Accordingly, Applicants submit that the claims are definite and request that the Examiner reconsider and withdraw this rejection.

Claim 125 stands rejected under 35 U.S.C. §112, second paragraph, as being indefinite because it is unclear as to how repeated dispensing to the same localized area relates to the limitation to adjustment for a single coupling step. The Examiner is of the opinion that the prior response was not persuasive because Applicants did not address the relationship between the multiple dispending of claim 125 and the single coupling step of the independent claims. In response, Applicants have amended claim 125 to clarify that the dispenser is operative to repeatedly perform single coupling steps wherein each coupling step dispenses droplets no

greater than 5 nl. Accordingly, Applicants submit that this claim is definite and request that the Examiner reconsider and withdraw this rejection.

Claim 50 stands rejected under 35 U.S.C. §112, second paragraph, as being indefinite because it is unclear how a pellet (solid) can be in solution as in claim 48. In response, Applicants have amended claim 50 to clarify that the pellet is suspended in solution. Support for this amendment can be found in the specification at page 30, lines 9 and line 17, where Applicants teach a pellet that is suspendable in a liquid. Accordingly, Applicants submit that this claim is definite and request that this rejection be reconsidered and withdrawn.

Claim 95 stands rejected under 35 U.S.C. §112, second paragraph, as being indefinite because it is unclear how a compound includes a molecule. The Examiner queries whether the compound is the linking molecule or whether it includes a linking moiety or portion. Without acquiescing to the rejection, Applicants have amended claim 95 to replace "includes" with "is" such that the claim reads, "wherein the compound is a linker molecule," thus obviating this rejection. Accordingly, Applicants request that the rejection be reconsidered and withdrawn.

Having addressed all outstanding issues, Applicants respectfully request reconsideration and allowance of this case.

Respectfully submitted,

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Pyrex

From Wikipedia, the free encyclopedia.

It is requested that this article (or a section of this article) be expanded.

See the request at Wikipedia:Requests for expansion or elsewhere on this talk page.

Pyrex is a brand name of borosilicate glass introduced by Corning Glass Works in 1924. Though borosilicates had been produced before, the name Pyrex is widely used as a synonym for the material.

Pyrex is created by adding boron to the traditional glassmaker's "frit" of silicate sand, soda, and ground lime. The boron gives borosilicate glass a reduced thermal coefficient (about one-third that of ordinary glass), making it more resistant to heat. Pyrex is also less dense than ordinary glass. Since Pyrex melts at a higher temperature than ordinary glass, some new techniques were required to bring Pyrex into industrial production. Borrowing from the welding trade, new burners combining oxygen with natural gas were required.

Caltech's famous 200-inch telescope mirror at Mount Palomar was cast by Corning during 1934-36 out of Pyrex, which expands and contracts less than ordinary glass.

External links

- Illustrated history of the Palomar observatory and the Pyrex lens (http://www.astro.caltech.edu/observatories/palomar/history/)

Reference

- Rogove, Susan Tobier; Steinhauer, Marcia Buan (1993). *Pyrex by Corning: A Collector's Guide*. Antique Publications. ISBN 091541094X

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